

WHAT IS CLAIMED IS:

1. An onboard semiconductor device, comprising:
a power chip circuit board on which a power chip is mounted;
a control circuit board having mounted thereon an electrical component in relation to said power chip; and
an outer case in which said power chip circuit board and the control circuit board are contained,
wherein the control circuit board and the outer case are removably fixed to each other.
2. An onboard semiconductor device according to claim 1, further comprising fixing means for fixing the control circuit board to the outer case, said fixing means being a pawl projectingly provided on the outer case.
3. An onboard semiconductor device according to claim 1, further comprising means for electrically connecting the power chip circuit board circuit board to the control c.b, wherein the said connecting means includes a lead electrically connected to the power chip and fixed to the outer case, and a connector attached to the control c.b, so as to be fitted to the lead.
4. An onboard semiconductor device according to claim 1, further comprising means for electrically connecting the power chip circuit board to the control circuit board, wherein the said

*Sub
control*

connecting means includes a conductive material member electrically connected to the power chip and fixed to the outer case, a conductive land provided on the control circuit board for connection with the power chip, and an elastic electrical connection material intervening between the conductive material member and the conductive land, and the control circuit board is fixed to the outer case in a state where the electrical connection material is compressed.

5. An onboard semiconductor device according to claim 1, further comprising means for electrically connecting the power chip circuit board to the control circuit board, wherein said connecting means includes a lead that is electrically connected to the power chip, a lower end portion of which is fixed to the outer case, and which is formed into a spring shape, and the control circuit board is fixed to the outer enclosing case in a state where a tip side of the lead is compressed.

6. An onboard semiconductor device according to claim 1, further comprising means for fixing the control circuit board to the outer case, said fixing means being a securing member like a screw.

*valid
B17*